

CLAIMS

What is claimed is:

1. A method of controlling a clothes dryer, the method comprising:
detecting conditions of the clothes using a sensor; and
performing at least one of a complex drying function to perform a drying operation, a deodorizing operation and a wrinkle removing operation, a wrinkle removing function to perform the wrinkle removing operation and the drying operation, and a drying function to perform the drying operation, according to the detected conditions of the clothes.

2. The method as set forth in claim 1, wherein:

detecting the conditions of the clothes using the sensor comprises detecting an amount of moisture of the clothes by a humidity sensor included in the sensor, and detecting an amount of odor of the clothes by a gas sensor included in the sensor,

performing the complex drying function if the amount of odor of the clothes is larger than an odor reference value,

performing the wrinkle removing function if the amounts of the moisture and odor of the clothes are equal to or smaller than a moisture reference value and the odor reference value, respectively, and

performing the drying function if the amount of the moisture of the clothes is larger than the moisture reference value and the amount of the odor of the clothes is equal to or smaller than the odor reference value.

3. The method as set forth in claim 2, wherein the clothes dryer includes a chamber to accommodate the clothes, and a blower to supply high-pressure air into the chamber, the method further comprising:

spreading the moisture and odor of the clothes throughout the chamber using the high-pressure air; and

detecting amounts of the moisture and odor of the clothes spread throughout air inside the chamber using the humidity sensor and the gas sensor.

4. A method of controlling a clothes dryer, the clothes dryer having an input unit by which a user selects an operation mode of the clothes dryer, the method comprising:

receiving information about the operation mode selected by the user through the input unit; and

performing at least one of a complex drying function to perform a drying operation, a deodorizing operation and a wrinkle removing operation, a wrinkle removing function to perform the wrinkle removing operation and the drying operation, and a drying function to perform the drying operation, according to the received information about the operation mode.

5. A method of controlling a clothes dryer, the method comprising:

removing odor from the clothes;

supplying moisture to the clothes; and

collectively performing wrinkle removal and drying of the clothes by drying the clothes containing the moisture.

6. The method as set forth in claim 5, wherein the clothes dryer includes a humidity sensor to detect an amount of moisture of the clothes, the method further comprising:

determining a minimum temperature and a minimum supplying time of a current of warm air required to dry the clothes, according to a detection result of the humidity sensor; and

controlling a temperature and a supplying time of the current of warm air to meet the minimum temperature and the minimum supplying time of the current of warm air.

7. The method as set forth in claim 5, wherein the clothes dryer includes a gas sensor to detect an amount of odor of the clothes, and an ozonizer to generate ozone, the method further comprising:

generating the ozone using the ozonizer so that the odor of the clothes is removed when the amount of odor of the clothes is larger than an odor reference value.

8. A clothes dryer, comprising:

a chamber to accommodate clothes;

a first duct to supply air of first pressure into the chamber;

a second duct to supply air of second pressure into the chamber;

a heater to heat air supplied through at least one of the first and second ducts; and an ozonizer to supply ozone into the chamber through at least one of the first and second ducts.

9. The clothes dryer as set forth in claim 8, wherein the first pressure is relatively higher than the second pressure.

10. The clothes dryer as set forth in claim 8, wherein the first duct is provided in an internal side wall of the chamber.

11. The clothes dryer as set forth in claim 8, wherein a plurality of vents are positioned in an internal wall of the chamber, and the first duct communicates with the plurality of vents to supply air into the chamber through the plurality of vents.

12. The clothes dryer as set forth in claim 8, further comprising:
a door to selectively open and close the chamber;
wherein the door includes a transparent member to observe an internal state of the chamber through the transparent member of the door while the door is closed.

13. An apparatus for containing clothes, the apparatus comprising:
a chamber to accommodate clothes;
a heater to generate a current of warm air by heating air supplied into the chamber;
an ozonizer to supply ozone into the chamber; and
a control unit to control the heater and/or the ozonizer to periodically perform a drying function and/or a deodorizing function according to amounts of moisture and/or odor of the clothes.

14. An apparatus comprising:
a chamber to accommodate an article of clothing;
a humidifier to selectively supply moisture to the internal chamber; and
a heater to selectively supply heat to the chamber.

15. The apparatus according to claim 14, further comprising:

an ozonizer to selectively supply ozone to the chamber; and
an ozone disposer to selectively dispose of the ozone supplied to the chamber.

16. The apparatus according to claim 15, further comprising:
a blower, communicating with the chamber to circulate an atmosphere of the chamber.

17. The apparatus according to claim 16, wherein:
the ozone disposer is connected to the blower, and is positioned between the blower
and the chamber.

18. The apparatus according to claim 16, further comprising:
a filter positioned between the chamber and the blower, to filter impurities separated
from an article of clothing in the chamber.

19. The apparatus according to claim 16, further comprising:
a controller to control the humidifier, the heater, the ozonizer, the ozone disposer, and
the blower.

20. The apparatus according to claim 19, wherein the controller further comprises:
a control unit; and
a driving unit,
wherein the control unit accepts an input, and controls the driving unit to selectively
drive the humidifier, the heater, the ozonizer, the ozone disposer, and the blower based on the
input.

21. The apparatus according to claim 20, wherein:
the control unit accepts the input from a user.

22. The apparatus according to claim 20, further comprising:
a sensor to determine a condition of the chamber,
wherein the input is the condition of the chamber, and the control unit accepts the input
from the sensor.

23. The apparatus according to claim 22, wherein the sensor comprises:
a humidity sensor;
a gas sensor;
a temperature sensor; and
an ozone sensor.

24. The apparatus according to claim 23, wherein:
when an article of clothing is placed in the chamber, the sensor determines a condition of the article of clothing based on the condition of the chamber, and the control unit controls the driving unit to selectively drive the humidifier, the heater, the ozonizer, the ozone disposer, and the blower based on the condition of the article of clothing, to selectively deodorize, dry, and remove a wrinkle from the article of clothing.

25. The apparatus according to claim 16, further comprising:
a first duct, connected to the blower and positioned in a side wall of the apparatus; and
a vent, positioned on the side wall of the apparatus to communicate between the first duct and the chamber, and supply air at a first pressure.

26. The apparatus according to claim 25, further comprising:
a second duct connected to the blower and communicating with the chamber to supply air at a second pressure.

27. The apparatus according to claim 26, wherein:
the heater heats air passing through at least one of the first duct and the second duct;
and
the ozonizer supplies ozone to the chamber through at least one of the first duct and the second duct.

28. The apparatus according to claim 26, wherein:
the first duct is an internal duct; and
the second duct is an external duct.

29. The apparatus according to claim 16, further comprising:

a door to selectively open and close the chamber, wherein the door includes a transparent member to observe an internal state of the chamber through the transparent member of the door, while the door is closed.

30. An apparatus comprising:

a chamber to accommodate an article of clothing;

a heater to selectively supply heat to the chamber;

an ozonizer to selectively supply ozone to the chamber;

a humidifier to selectively supply moisture to the chamber,

a sensor to determine a condition of the chamber; and

a controller to selectively control the heater, ozonizer, and the humidifier, based on one of the condition determined by the sensor and an input by a user, to selectively dry, deodorize, and remove a wrinkle from the article of clothing.

31. A method comprising:

accepting an input from one of a user and a sensor sensing a condition of a chamber to accommodate an article of clothing;

performing, based on the input, one of a complex drying function, a wrinkle removing function, and a simple drying function, until an amount of moisture in the chamber is less than or equal to a moisture reference value.

32. The method according to claim 31, wherein the complex drying function comprises:

blowing air into the chamber;

supplying at least one of ozone and humidity to the chamber;

determining whether an amount of odor in the chamber is less than or equal to an odor reference value;

if the amount of odor in the chamber is not less than or equal to the odor reference value, supplying at least one of ozone and humidity to the chamber, and determining whether the amount of odor in the chamber is less than or equal to the odor reference value, until the amount of odor in the chamber is less than or equal to the odor reference value;

if the amount of odor in the chamber is less than or equal to the odor reference value, removing the ozone; and

performing the wrinkle removing function.

33. The method according to claim 31, wherein the wrinkle removing function comprises:

supplying humidity to the chamber; and
performing the simple drying function.

34. The method according to claim 31, wherein the simple drying function comprises:

blowing warm air into the chamber.

35. The method according to claim 31, wherein if the input is accepted from the sensor, the method further comprises:

blowing air into the chamber; and
determining an amount of odor and an amount of moisture in the chamber, prior to performing one of the complex drying function, the wrinkle removing function, and the simple drying function.